

REMARKS

This is in full and timely response the non-final Office Action mailed on January 9, 2004. Reexamination in light of the following remarks is respectfully requested.

Claims 1, 3-13, 15-23, 25-33, 35-45, 47-55, 57-67, 69-74, 76-78, 80, 82-83, 85-86, 88-89, 91-106 are pending in this application, with claims 1, 13, 23, 33, 45, 55, 65, 72, 78, 85, 86, 88, 89 and 91-106 being independent. No new matter is added.

Allowable subject matter

Appreciation is expressed for the indication that claims 2, 4-8, 10-12, 14, 16-22, 24, 26-32, 34, 36-40, 42-44, 46, 48-54, 56, 58-64, 68, 71, 75, 77, 83, 85, 86, 88 and 91-106 contain allowable subject matter. Note that no ground for rejection of claim 81 has been provided within the non-final Office Action. As a result, *claim 81 is deemed to also contain allowable subject matter.*

Claim objections

The Office Action object to the term “living body” found within claims 2, 4, 12, 14, 24, 34, 36, 46, 54, 68, 70, 75 and 81.

In response, the claims refer to a plurality of objects designed by an object-oriented design corresponding to the behavior of a living body. In this regard, the specification acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication. *Bell Atlantic Network Services Inc. v. Covad Communications Group Inc.*, 59 USPQ2d 1865, 1870 (Fed. Cir. 2001).

Passages throughout the specification provide that “various elements related to the behaviors of a living body can be applied, such as the elements of behaviors of a living body (e.g., learning, thinking, recognition) and the means for performing the behaviors of a living

body (limbs, joints, motion control)” (page 12, lines 1-3). Moreover, the robot “can behave naturally like a living body having reality and a sense of living” (page 22, lines 2-3). The Office Action acknowledges that the terms “behaviors of a living body” and “can behave naturally like a living body” are found within the specification. But while not conceding the propriety of this objection and in order to advance prosecution of the above-identified application, the claims have been amended where appropriate by replacing “behavior of a living body” with -- behaviors of a living body --.

The Office Action has also maintained the objection to claims 2, 4, 12, 14, 24, 34, 36, 46, 54, 68, 70, 75, and 81 for the phrases “adapted for” or “adapted to.”

In response, it is submitted that the phrase “adapted to” is both clear and definite, especially in light of claims 7-15 found within U.S. Patent No. 6,584,378 to Anfindsen, which is not prior art against the above-identified application *but has been passed to issuance by the Examiner with the phrase “adapted to” found within those claims*. Respectfully, the objection to claims 2, 4, 12, 14, 24, 34, 36, 46, 54, 68, 70, 75, and 81 for the phrases “adapted for” or “adapted to” is believed to be inconsistent with the treatment of similar claim language found within other patents issued by the Examiner, especially in light of the *Anfindsen* patent.

Withdrawal of these objections is respectfully requested.

Rejections under 35 U.S.C. §102

Claims 1, 3, 9, 13, 15, 23, 25, 33, 35, 41, 45, 47, 55, 65, 66, 67, 69, 72, 73, 74, 76, 78, 79, 80, 82 and 89 under 35 U.S.C. §102 as allegedly being anticipated by Hara et al., “Real-time Facial Interaction between Human and 3D Face Robot Agent”, IEEE International Workshop on Robot and Human Communication, pp. 401-409, 1996 (Hara).

This rejection is traversed at least for the following reasons.

The Office Action indicates that claims 2, 14, 24, 34, 46, 56, 68 and 75 are objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. No ground for rejection of claim 81 has been provided within the non-final Office Action, which is deemed to also contain allowable subject matter as a result.

Accordingly, while not conceding the propriety of this rejection and in order to advance prosecution of the above-identified application,

the features of claim 2 as indicated to contain allowable subject matter have been wholly incorporated into claim 1 to form amended claim 1,

the features of claim 14 as indicated to contain allowable subject matter have been wholly incorporated into claim 13 to form amended claim 13,

the features of claim 24 as indicated to contain allowable subject matter have been wholly incorporated into claim 23 to form amended claim 23,

the features of claim 34 as indicated to contain allowable subject matter have been wholly incorporated into claim 33 to form amended claim 33,

the features of claim 46 as indicated to contain allowable subject matter have been wholly incorporated into claim 45 to form amended claim 45,

the features of claim 56 as indicated to contain allowable subject matter have been wholly incorporated into claim 55 to form amended claim 55,

the features of claim 68 as indicated to contain allowable subject matter have been wholly incorporated into claim 33 to form amended claim 33,

the features of claim 75 as indicated to contain allowable subject matter have been wholly incorporated into claim 72 to form amended claim 72, and

the features of claim 81 as indicated to contain allowable subject matter have been wholly incorporated into claim 78 to form amended claim 78.

In light of the above, the rejection of the claims 1, 3, 9, 13, 15, 23, 25, 33, 35, 41, 45, 47, 55, 65, 66, 67, 69, 72, 73, 74, 76, 78, 79, 80 and 82 is moot.

Regarding the rejection of claim 89, please note that the Office Action of April 10, 2003 indicated that claim 89 also contains allowable subject matter. Moreover, claim 89 is drawn to a control method for robot device comprising:

a detection step of detecting a stimulus applied to the robot device from outside;

a response processing decision step of deciding response processing of the robot device on the basis of the stimulus detected at the detection step;

a response execution step of causing the robot device to execute the response processing decided at the response processing decision step; and

wherein at the response processing decision step, the response processing is decided on the basis of the record information stored in storage means,

wherein the response processing decision means is an instinct module for deciding an instinct in response to an instinct level, which is the record information, changing in response to the stimulus due to an instinct, and

the response execution means causes the robot device to take a behavior and/or an action for expressing the instinct decided by the instinct module.

These features in combination are absent from Hara.

In addition, at least independent claims 1, 13 and 23 include an emotion module in which a plurality of emotion units representing various emotions affects one another to output an emotion.

While Hara arguably teaches a plurality of emotion units such as surprise, fear, anger, disgust, happiness, and sadness (figure 5, table 5 and photo 2), Hara fails to disclose, teach or suggest surprise, fear, anger, disgust, happiness, or sadness affecting one another to output an emotion. Instead, Hara arguably teaches individually outputting one of the surprise emotion unit, the fear emotion unit, the anger emotion unit, the disgust emotion unit, the happiness emotion unit, and the sadness emotion unit as the outputted emotion, without being affected by another of the emotion units. Table 7 of Hara is the result of a recognition test. Thus, the emotion units of Hara are individually output as discreet emotions.

At least independent claims 33, 45 and 55 include an instinct module in which a plurality of instinct units representing various instincts output individual instincts.

While Hara arguably teaches a plurality of emotion units, Hara fails to disclose, teach or suggest a plurality of instinct units. Thus, Hara fails to disclose, teach or suggest an instinct module in which a plurality of instinct units representing various instincts output individual instincts.

The Office Action refers to photo 3 for the teaching of an instinct module. However, an instinct module is not found within figure 3. Instead, photo 3 shows two examples of facial expressions in response to recognition displayed on a subject (page 408). But assuming arguendo that photo 3 of Hara teaches an instinct module, Hara still fails to disclose, teach or suggest a plurality of instinct units, as claimed, since only a single function of facial recognition is disclosed.

At least independent claims 65, 72 and 78 include a plurality of emotion units, along with a plurality of instinct units.

But as shown hereinabove, both a plurality of emotion units and with a plurality of instinct units is absent from Hara.

Withdrawal of this rejection and allowance of the claims is respectfully requested.

Conclusion

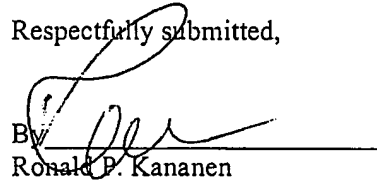
For the foregoing reasons, all the claims now pending in the present application are allowable, and the present application is in condition for allowance. (original) Accordingly, favorable reexamination and reconsideration of the application in light of the amendments and remarks is courteously solicited.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone Brian K. Dutton, Reg. No. 47,255, at 202-955-8753 or the undersigned attorney at the below-listed number.

If any fee is required or any overpayment made, the Commissioner is hereby authorized to charge the fee or credit the overpayment to Deposit Account # 18-0013.

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Respectfully submitted,


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